COMPONENTS:

- (1) Benzenesulfonamide, 4-amino-N-[5-(2-methyl-2-propyl)-1,3,4-thiadiazol-2-y1]-; C₁₂H₁₆N₄O₂S₂; [535-65-9]
- (2) Phosphoric acid, disodium salt; Na₂HPO₄: [7558-94-4]
- (3) 1,2,3-Propanetricarboxylic acid, 2-hydroxy- (citric acid); C6H8O7; [77-92-9]
- (4) Water; H₂O; [7732-18-5]

VARIABLES:

One temperature: 37°C; one pH: 3.5

ORIGINAL MEASUREMENTS:

Alric, R.; Puech, R.

J. Pharmacol. (Paris) 1971, 2(2), 141-54.

PREPARED BY:

R. Piekos

EXPERIMENTAL VALUES:

Intrinsic solubility^a of 4-amino-N-[5-(2-methyl-2-propyl)-1,3,4-thiadiazol-2-yl]benzenesulfonamide in a solution 0.025M in Na₂HPO₄ and 0.05M in citric acid, of pH 3.5, at 37° C is (1.82 ± 0.05) x 10^{-4} mol liter⁻¹.

^aUnder "intrinsic solubility" a minimum on the solubility - pH curve is meant which corresponds to the limiting concentration of the undissociated form of the sulfonamide.

AUXILIARY INFORMATION

METHOD/APPARATUS/PROCEDURE:

The soln was equilibrated for 48 h in a thermostat under occassional stirring. Samples were withdrawn through a 1- μ membrane filter, dild with 0.155M NaOH soln to ensure total dissocn of the sulfonamide, and its content was detd by UV spectrophotometry.

SOURCE AND PURITY OF MATERIALS:

Nothing specified.

ESTIMATED ERROR:

Soly: std error of 8 measurements was ±0.05 × 10⁻⁴ mol liter⁻¹ (authors).

pH : accuracy ± 0.5 pH unit (authors).

Temp: $\pm 0.1^{\circ}$ C (authors).

REFERENCES: